The background papers on the candidate national program priorities are intended to initiate further discussion. When priorities are selected more detailed strategies with in-depth background information, numerical targets, schedules, milestones and performance measures will be developed.

Proposed Priority: Wet Weather: Combined Sewer Overflows/Sanitary Sewer Overflows (CSOs/SSO)s, Storm water, and Concentrated Animal Feeding Operations (CAFOs)

Universe and Types of Facilities: CSOs/SSOs are defined as municipal facilities with combined sewer overflows (CSOs) and separate sanitary overflows (SSOs). There are approximately 900 CSO communities serving over 40 million people. Most combined sewer systems were constructed 50 or more years ago. There are approximately 19,000 separate sanitary sewer municipal systems with over 40,000 overflows annually. The total number of storm water dischargers is unknown but expected to be several hundred thousand. Storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events that often contain pollutants in quantities that could adversely effect water quality. A CAFO is a livestock facility where animals are kept and raised in confinement and which meets specific regulatory criteria. The total number of CAFOs is estimated to be about 15,500. CAFO discharges account for a significant share of remaining water quality problems. (For further information and explanations on CSOs/SSOs, Storm water and CAFOs go to http://www.epa.gov/compliance/civil/programs/cwa/cwaenfpriority.html and for additional information on CAFOs go to http://www.epa.gov/agriculture/anafoidx.html.)

Geographic Range: Most CSO communities are located in the Northeast, Great Lakes, and Northwest regions. Separate sanitary sewer systems and storm water discharges are nationwide occurrences. CAFOs exist in all regions of the country with more facilities in the mid-plains states, the eastern sea board, and the western coastal region.

Environmental Risks: Discharges from wet weather events (e.g., overflows from combined sewers or sanitary sewers, CAFO discharges and run-off, and storm water run-off) are contributors to the leading causes of water quality impairment as documented in CWA Section 305(b) reports and represent significant threats to public health and the environment. EPA has prioritized wet weather compliance problems by looking at regulated facilities contributing to the impairment of watersheds, beaches and other recreational areas, shellfish beds, source water protection areas, environmental justice areas, and other sensitive areas.

The main pollutants in sewer overflows are fecal coliform (raw sewage), bacteria, pathogens, and nutrients, untreated industrial wastes, toxic pollutants such as oil and pesticides, and debris washed into the sewer system. Storm water runoff is a major cause of water quality impairment. According to the *Report to Congress on The Phase I Storm Water Regulations* (U.S. EPA, 2000), urban storm water runoff contributes to 13 percent of impaired river and stream miles, 21 percent of impaired lake acres, 55 percent of impaired ocean shoreline miles, and 46 percent of impaired estuary square miles. Storm water runoff can carry high levels of pollutants such as sediment, oil and grease, suspended solids, nutrients, heavy metals, pathogens, toxins, and trash into sewer systems and ultimately into our streams, rivers, lakes, estuaries, wetlands, and oceans.

This creates an unhealthy environment for aquatic organisms, wildlife and humans. Pollutants in sewer overflows and storm water discharges can cause a variety of diseases in humans, ranging from dysentery to hepatitis. They can also contaminate fish, shellfish, and drinking water sources create harmful algal blooms, and impair water quality.

Discharges from CAFOs to water bodies can occur through poor maintenance of waste lagoons, improper storage of animal waste, excessive and improper application of manure to crops, and excessive rainfall resulting in spills and leaks of manure management areas. Key pollutants from CAFOs that impair water quality include nutrients (nitrogen and phosphorus) and pathogens (i.e. fecal coliform) These pollutants kill fish and contaminate shellfish, cause excessive algae growth, harm marine mammals, and contaminate drinking water. Changes within the sector such as increases in the number of large CAFOs, the increased size of individual CAFOs slaughterhouses, and concentration of CAFOs in some geographical areas has resulted in increased potential for environmental impacts.

Noncompliance Information:

The noncompliance universe of CSOs and SSOs is currently being developed as directed under the CSO and SSO Compliance and Enforcement Strategy. The NPDES storm water requirements have been in effect for more than ten years. However, EPA and state storm water inspection data reveal that a majority of industrial facilities inspected over the last ten years do not have an NPDES storm water permit. Moreover, there is significant non-compliance at permitted sites. In August, 2003, EPA issued a national strategy to improve compliance with storm water requirements and protect our nation's waters from the harmful effects of polluted storm water. The *Strategy* was developed for use by EPA Regions. In addition, the Regions are encouraged to work with their states in adopting similar approaches to storm water enforcement. The IG Audit, "State Enforcement of Clean Water Act Dischargers Can be More Effective," noted the need for states to have more effective risk-based enforcement strategies to better protect human health and the environment and to meet the goals of the CWA. The *Strategy* anticipates a strong EPA/state partnership to address non-compliance with storm water requirements. On February 12, 2003, EPA promulgated new regulations to update the national program to manage and avoid environmental harm from animal manure and waste generated by CAFOs. Educational outreach and compliance assistance over the next several years will be necessary to bring into compliance the approximately 15,500 CAFOs that require National Pollutant Discharge Elimination System permits under the Clean Water Act. EPA regional offices and States are working to balance varying State circumstances and program approaches so that all CAFOs will be covered by NPDES permits and have adopted nutrient management plans by 2006. On August 18, 2003, the Office of Regulatory Enforcement issued the *Final CWA Enforcement Strategy Update for Concentrated Animal Feeding Operations* to address noncompliance problems at large CAFOs regulated since 1974 whose discharges are causing significant public health impacts or environmental harm.